

REMARKS

The Office Action dated December 3, 2003 has been received and carefully studied.

The Examiner rejects claims 1-3 under 35 U.S.C. §103(a) as being unpatentable over Misawa et al., U.S. Patent No. 5,548,073 in view of Claussen et al., U.S. Patent No. 5,272,259. The Examiner states that Misawa et al. teach that it is common to have a polyvinyl alcohol type polarizing film containing, in a substrate, a water soluble dye wherein the sulfonate groups in the trans position on the stilbene moiety would be present in the greater amount due to greater steric stability. The Examiner admits that Misawa et al. do not disclose that the phenylamino substituent on the sulfonic acid-substituted naphthalene moiety is replaced by a phenylazo substituent. The Examiner cites Claussen as teaching polyvinyl alcohol type polarizing film containing, in a substrate, a water soluble dye in the form of a free acid containing a phenylazo group. The Examiner concludes that it would have been obvious to replace the phenylamino substituent on the naphthalene moiety of the common azo dye molecule of Misawa et al. with a phenylazo group in order to obtain a polarizing film containing a dichroic azo dye molecule with uniform dichroism.

The rejection is respectfully traversed.

As the Examiner recognizes, compound A of Misawa et al. differs from the dyes used in the polarizing films recited in the instant claims in that it includes a phenylamino substituent on the sulphonic acid-substituted naphthalene moiety, whereas the dyes

recited in the instant claims require a phenylazo substituent. Nowhere do Misawa et al. suggest that the sulphonic acid-substituted naphthalene moiety can be substituted with a phenylazo group; indeed, Misawa et al. instead teach that the sulphonic acid-substituted naphthalene moiety may be unsubstituted, or may be substituted with a hydroxyl group, an amino group, a methylamino group, a β -hydroxyethylamino group, a C₁₋₂ acylamino group, or a phenylamino or benzoyl amino group. Applicants note that Misawa et al. teach that compound A is prior art and is inferior to an identical compound but devoid of the nitro group on the phenyl moiety on the left-hand side of the molecule. Thus, Misawa et al. suggest modifying the phenyl moiety of the compound to improve the polarizing film, and provide no suggestion that the film can be improved by modifying the sulphonic acid-substituted naphthalene moiety of the compound. Even were such a suggestion present, there is no suggestion that improvement could be achieved by substituting the naphthalene moiety with a phenylazo group.

The Examiner cites Claussen et al. for its teaching of a polyvinyl alcohol type polarizing film containing a water-soluble dye that includes a sulphonic acid-substituted naphthalene moiety that may be substituted with a phenylazo group. However, there is no suggestion in either Claussen et al. or Misawa et al. to modify the dye of Misawa et al. by picking among the myriad of substituents disclosed in Claussen et al. and choosing the phenylazo group, nor is there any incentive or motivation provided for doing so. Applicants respectfully submit that the Examiner's contention that substituting the phenylazo of Claussen et al. for the phenylamino of Misawa et al. will result in more

uniform dichroism is speculation.

It is well settled that there must be some motivation or suggestion in the prior art to make a modification, yet no reason has been provided as to why the skilled artisan would pick and choose among the numerous naphthalene substituents of Claussen et al. and attempt to modify Misawa et al. accordingly. See *In re Rouffet* 47 U.S.P.Q.2d 1453, 1457-58 (Fed. Cir. 1998):

"Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patent solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be 'an illogical and inappropriate process by which to determine patentability'. *Sensorics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

"To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed."

Indeed, Claussen et al. does not show that a phenylamino substituent on a sulfonic acid-substituted naphthalene moiety is interchangeable with a phenylazo substituent.

In order to further support the patentability of the instant claims, submitted herewith is a Declaration of Mr. Shoji Oiso, one of the inventors of the present invention. In the Oiso Declaration, comparisons are made among polarizing films that use the compounds of the present invention and a film that uses Compound A of Misawa et al. cited by the

Examiner. The data demonstrate that surprisingly, the polarizing films made in accordance with the present invention have a higher polarizing degree than that of Misawa et al., without decreasing the single plate transmittance. This is rather unexpected. In addition, the films of the present invention have higher values in polarization degree, parallel transmittance, and are significantly higher in contrast than the film of Misawa et al.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,


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